AMENDMENT TO THE CLAIMS

The Listing of Claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Sub A1

1. (currently amended) A method of preparing a high stability ~~selectable~~ selective ~~hydrogenate~~ hydrogenation catalyst ~~producing and using~~ for use in DMCHD manufacturing including the steps of:

~~(1) a preparing procedure for~~ forming an Ru/Al_2O_3 catalyst including:

a. ~~putting~~ inserting 110 grams Al_2O_3 into a triple neck bottle under ~~in a suction of~~ vacuum conditions;

b. heating said bottle at a temperature of 110°C for 6 hours;

c. cooling to ~~atmospheric~~ ambient temperature then ~~stopping~~ removing the bottle from vacuum conditions;

d. ~~to add~~ adding a solution of 4.6 grams Ru/Cl_3 into said bottle and heating at a temperature of 60°C;

e. ~~to dry solution of~~ drying said solution by vacuum suction; and

f. ~~to heat~~ heating said bottle in a heater at a temperature of 120°C for 16 hours ~~to preparation process thereof.~~; whereby the catalyst activity is raised by the steps of:

A' cont

~~(2) an activity raising procedure for said catalyst including:~~

~~a.~~ g. ~~taking~~ removing the intermediate product of Ru/Al_2O_3 catalyst ~~out~~ from said bottle after step f ~~which is prepared from step (1)~~, and putting said intermediate product into a stainless steel breeder;

~~b.~~ h. ~~to add~~ adding hydrogen gas into said breeder ~~with~~ at a predetermined ~~velocity~~ flow rate and ~~heated~~ heating at a temperature of 450°C for 2 hours; and

~~c.~~ i. cooling to atmospheric temperature and then adding a small quantity of air for ~~passivate~~ passivating the surface of said catalyst to obtain a ~~so as to get~~ high stability catalyst ~~ready~~ for ~~selectable~~ selective ~~hydrogenating~~ hydrogenation in a DMCHD manufacturing process ~~therefore~~.

~~(3) a DMCHD manufacturing process which said high stability catalyst is used for a selectable hydrogenating reaction including:~~

~~a. putting said Ru/AL_2O_3 catalyst onto a fixing bed of a reactor;~~

~~b. to dissolve DMT (dimethyl terephthalate) in to ethyl acetate solution; and~~

~~c. guiding DMT solution into said reactor with a predetermined velocity for a selectable hydrogenate reaction to provide a high yield capacity capacity of DMCHD manufacturing in high stability for a long term.~~

A' cont

2. (currently amended) A method for producing high stability ~~selectable~~ selective ~~hydrogenate~~ hydrogenation catalyst according to steps a-f ~~step (1)~~ of Claim 1, wherein said Al_2O_3 and $RuCl_3$ has a fixed ratio of 110:4.6075 by w.t.

3. (currently amended) A method for producing high stability ~~selectable~~ selective ~~hydrogenate~~ hydrogenation catalyst according to step h ~~step (2)~~ of Claim 1, wherein said predetermined ~~velocity~~ flow rate of hydrogenate gas is 10 to 40 ml/min.

4. (withdrawn) A DMCHD manufacturing process according to step (3) of Claim 1, wherein a reaction temperature in said reactor is 100°C to 140°C.

5. (withdrawn) A DMCHD manufacturing process according to step (3) of Claim 1, wherein a reaction pressure in said reactor is 700 to 800 psi.

A1 cont

6. (withdrawn) A DMCHD manufacturing process according to step (3) of Claim 1, wherein said MDT solution guided into said reactor has a velocity of 12 to 48 LHSV(h^{-1}).

7. (withdrawn) A DMCHD manufacturing process according to step (3) of Claim 1, wherein said high production of step (3) of Claim 1, wherein said high production ratio is over 90%.

8. (withdrawn) A DMCHD manufacturing process according to step (3) of Claim 1, wherein said catalyst has a long stability duration of 500 to 600 hours activation.